Listing of Claims:

1. Canceled.
2. Canceled.
3. Canceled.
4. Canceled.
5. Canceled.
6. Canceled.
7. Canceled.
8. Canceled.
9. Canceled.
10. Canceled.
11. Canceled.
12. Canceled.
13. Canceled.

14. (new). Optical amplifying materials comprising a support, having coated thereon an amplifying layer and a luminescence layer above this layer, wherein said amplifying layer contains nanocrystalline, nanoporous aluminum oxide and/or aluminum oxide/hydroxide.

15. (new). Optical amplifying materials according to claim 14, wherein said amplifying layer contains said nanocrystalline, nanoporous aluminum oxide and/or aluminum oxide/hydroxide in a quantity from 0.1 g/m^2 to 20 g/m^2.

16. (new). Optical amplifying materials according to claim 14, wherein said amplifying layer contains said nanocrystalline, nanoporous aluminum oxide and/or aluminum oxide/hydroxide in a quantity from 1 g/m^2 to 10 g/m^2.

17. (new) Optical amplifying materials according to claim 14, wherein said nanocrystalline, nanoporous aluminum oxide and/or aluminum oxide/hydroxide in said amplifying layer comprises one or more of the elements of the periodic system of the elements with atomic numbers 57 to 71 in an amount of from 0.2 to 2.5 mole percent relative to Al_2O_3.

18. (new). Optical amplifying materials according to claim 14, wherein said amplifying layer contains up to 10 % of a binder relative to the quantity of the nanocrystalline, nanoporous aluminum oxide and/or aluminum oxide/hydroxide.

19. (new). Optical amplifying materials according to claim 18, wherein said binder is film forming.

20. (new). Optical amplifying materials according to claim 19, wherein said binder is polyvinyl alcohol.

21. (new). Optical amplifying materials according to claim 14, wherein said amplifying layer contains up to 5 % of a binder relative to the quantity of said nanocrystalline, nanoporous aluminum oxide and/or aluminum oxide/hydroxide.

22. (new). Optical amplifying materials according to claim 21, wherein said binder is film forming.

23. (new). Optical amplifying materials according to claim 22, wherein said binder is polyvinyl alcohol.

24. (new). Optical amplifying materials according to claim 14, wherein said luminescence layer consists of tris(8-hydroxyquinoline) aluminum.

25. (new). Optical amplifying materials according to claim 24, wherein said luminescence layer consists of the crystal modification of tris(8-hydroxyquinoline) aluminum showing green luminescence.

26. (new). Optical amplifying materials according to claim 12, wherein said crystal modification of tris(8-hydroxyquinoline) aluminum showing green luminescence in said luminescence layer is transformed to the crystal modification showing blue luminescence by illumination at room temperature in the presence of air with daylight.

27. (new). Optical amplifying materials according to claim 14, wherein said support is coated or uncoated paper, plastic film or glass.

28. (new). A support with an amplifying layer comprising nanocrystalline, nanoporous aluminum oxide and/or aluminum oxide/hydroxide.

29. (new). A support according to claim 28, wherein said nanocrystalline, nanoporous aluminum oxide and/or aluminum oxide/hydroxide in said amplifying layer comprises one or more of the elements of the periodic system of the elements with atomic numbers 57 to 71 in an amount of from 0.2 to 2.5 mole percent relative to Al_2O_3.

30. (new). A support according to claim 28, wherein said amplifying layer further comprises a binder.

31. (new) A support according to claim 28, wherein a luminescence layer is deposited on top of said amplifying layer.

32. A support according to claim 31, wherein said luminescence layer consists of the crystal modification of tris(8-hydroxyquinoline) aluminum showing green luminescence.

33. A support according to claim 32, wherein said crystal modification of tris(8-hydroxyquinoline) aluminum showing green luminescence in said luminescence layer is transformed to the crystal modification showing blue luminescence by illumination at room temperature in the presence of air with daylight.